## REMARKS

The Office Action dated January 16, 2007 has been received and carefully noted. The above amendments to the claims, and the following remarks, are submitted as a full and complete response thereto.

Claims 22-42 are currently pending in the application. Claim 22 has been amended to more particularly point out and distinctly claim the subject matter of the invention. No new matter has been added. Claims 22-42 are respectfully submitted for consideration.

The drawings were objected to because figure 1 should be designated by a legend, such as "Prior Art". Figure 1 has been amended to include a label of "Prior Art." Thus, the objection to the drawings is rendered moot.

Claims 22-42 were rejected under the judicially created doctrine of obviousness-type double patenting. The Office Action notes that a terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome a non-statutory double patenting rejection. Applicants respectfully submit herewith a terminal disclaimer in accordance with 37 CFR 1.321 (c). Therefore, Applicants respectfully submit that this non-statutory double patenting rejection is rendered moot.

Claims 22-28 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter of the invention. The Office Action stated that it is unclear whether the second determining step, the fetching step, and the changing step are performed in response to the initial

determining step. Claim 22 has been amended to recite that the second determining step, the fetching step, and the changing step are performed when it is determined that the default values are obtained through the memory interface. Therefore, Applicants submit that claim 22 is clear and definite.

The Office Action rejected claims 22-25, 27-32, 34-39, 41, and 42 under 35 U.S.C. §103(a) as being unpatentable over Egbert (U.S. Patent No. 6,407,960) in view of Chieng (U.S. Patent No. 6,035,346). The Office Action took the position that Egbert discloses all of the elements of the claims, with the exception of "when it is determined that the default values are obtained through a microprocessor interface, changing said default values according to data received through the microprocessor interface." The Office Action then cites Chieng as allegedly disclosing this limitation of the claims. The rejection is respectfully traversed for the following reasons.

Claim 22, upon which claims 23-28 are dependent, recites a method for configuring default values of a network device. The method includes determining whether default values are obtained through a memory interface, and when it is determined that the default values are obtained through the memory interface, performing the steps of: determining from a header whether any default value of the network device should be updated, fetching at least one configuration instruction from a memory when the determining step determines that the network device should be updated, and changing a register default value of said default values corresponding to an interpretation of at least one configuration instruction. When it is determined that the default values are obtained

through a microprocessor interface, changing the default values according to data received through the microprocessor interface.

Claim 29, upon which claims 30-35 are dependent, recites a network device having default values that are flexibly configurable. The network device includes a microprocessor interface, a memory interface, and a register file containing the default values for the network device. The memory interface is configured to receive configuration instructions and the network device is configured to interpret the received configuration instructions such that the corresponding values are mapped to corresponding default values of the register file. The network device is configurable to set default values based on data received through either the microprocessor interface and the memory interface.

Claim 36, upon which claims 37-42 are dependent, recites a network device including means for determining whether the default values are obtained through a microprocessor interface or a memory interface, means for determining from a header whether any default value of the network device should be updated, means for fetching at least one configuration instruction from the memory when the determining step determines that the network device should be updated, means changing a register default value of said default values corresponding to an interpretation of the at least one configuration instruction, and means for changing said default values according to data received through the microprocessor interface. The means for changing the default values according to data received through the microprocessor interface is configured to

change the default values when the means for determining whether the default values are obtained through a microprocessor interface or a memory interface determines that the default values are to be obtained through a microprocessor interface.

Therefore, the present invention provides for a new approach for chip and network component vendors to provide system integrators a dynamic configuration using a low cost EEPROM. With this approach, system integrators will have flexibility to change the default values of all configurable registers inside a network device, such as a switch/hub chip or components on a PC board. A network device will be able to update configuration setting either through the low cost EEPROM or through a microprocessor interface.

As will be discussed below, Egbert and Chieng, whether considered alone or in combination, fail to disclose or suggest all of the elements of the claims, and therefore fail to provide the advantages and features discussed above.

Egbert discloses an integrated device comprising a plurality of device registers each having a corresponding register address value, and an external memory interface. The external memory interface is configured to read register data values from an external memory, and includes address decoding logic configured to identify, for each read register data value, a corresponding one of the device registers based on reading the corresponding register address value from the external memory.

Chieng discloses a method and apparatus to reprogram flash ROM without proxy code. More specifically, Chieng discloses an adapter card having its own processor that

can be commanded to reprogram its control memory from an external processor. Control memory is where the adapter card's boot and operational instructions are stored. Boot instructions allow the adapter's processor to establish the adapter card's state upon power-up and reset operations. Operational instructions allow the adapter card to perform its designated task, e.g., act as a video controller card. The external processor commands the adapter card's processor to enter a hold state after which it downloads both reprogramming instructions and substitute operational instructions. When released from the hold state, the adapter card's processor executes the downloaded reprogramming instructions which result in storing the downloaded substitute operational instructions in the control memory, replacing any operational instructions that may have previously been stored.

Applicants respectfully submit that the combination of Egbert and Chieng fails to disclose or suggest all of the elements of the presently pending claims. For example, Egbert and Chieng do not disclose or suggest "determining from a header whether any default value of the network device should be updated" and "fetching at least one configuration instruction from a memory when the determining step determines that the network device should be updated," as recited in claim 22 and similarly recited in claim 36. According to an example of the invention, therefore, it is continually checked whether the RESET signal is set to inactive. Once the RESET signal is inactive, the header of the EEPROM is read. A key is determined and compared with the pre-defined

number inside the chip. If there is a match, then instructions are read from the EEPROM and the corresponding register default value is changed.

The Office Action alleges that Egbert discloses "determining from a header whether any default value of the network device should be updated" and "fetching at least one configuration instruction from a memory when the determining step determines that the network device should be updated" (Office Action, page 5). Applicants respectfully disagree. Egbert only discloses the reading of register address values and respective data values from external memory 14, and storing the register data values in the identified destination device registers 12 until an address value in an even memory location has most significant bit set to 1 (Egbert, Column 4, lines 5-10). Egbert does not disclose determining from a header whether a default value should be updated or fetching configuration instructions from memory when it is determined that the device should be updated. Egbert, as mentioned above, only discloses storing register data values in the destination device registers 12 until the most significant bit of the address value is set to 1.

Consequently, Egbert does not disclose or suggest all of the elements of claims 22 and 36. Chieng, as acknowledged by the Office Action, also fails to disclose or suggest these elements of the claims. As such, the combination of Egbert and Chieng fails to disclose or suggest all of the limitations of claims 22 and 36.

Furthermore, Applicants respectfully submit that the combination of Egbert and Chieng fails to disclose or suggest "wherein the memory interface is configured to

receive configuration instructions, wherein the network device is configured to interpret the received configuration instructions such that the corresponding values are mapped to corresponding default values of the register file," as recited in claim 29. In particular, Egbert and Chieng do not teach or suggest that the network device is configured to interpret received configuration instructions such that the corresponding values are mapped to corresponding default values of the register file.

As discussed above, Egbert merely discloses the reading of register address values and respective data values from external memory 14, and storing the register data values in the identified destination device registers 12 until an address value in an even memory location has most significant bit set to 1 (Egbert, Column 4, lines 5-10). Egbert does not disclose or suggest that the destination device is configured to interpret received configuration instructions such that the corresponding values are mapped to corresponding default values of the register file. Chieng also fails to disclose or suggest this limitation of claim 29. Accordingly, the combination of Egbert and Chieng fails to disclose or suggest "wherein the network device is configured to interpret the received configuration instructions such that the corresponding values are mapped to corresponding default values of the register file," as recited in claim 29.

Claims 23-28, 30-35, and 37-42 are dependent upon claims 22, 29, and 36, respectively. Therefore, claims 23-28, 30-35, and 37-42 should be allowed for at least their dependence upon claims 22, 29, and 36, and for the specific limitations recited therein.

Claims 26, 33, and 40 were rejected under 35 U.S.C. §103(a) as being unpatentable over Egbert in view of Chieng, and further in view of Gates (U.S. Patent No. 5,727,207). The rejection is respectfully traversed for the following reasons.

Gates discloses that configuration data indicative of interface requirements for interfacing to a host adapter card are automatically serially loaded on reset from an external device on the card into host adapter integrated circuit on the card. A driver program can then read the configuration data from the host adapter integrated circuit and thereby determine how to interface with the host adapter card.

Applicants note that claims 26, 33, and 40 are dependent upon claims 22, 29, and 36, respectively. As discussed above, the combination of Egbert and Chieng fails to disclose or suggest all of the elements of claims 22, 29, and 36. Moreover, Gates does not cure the deficiencies in Egbert and Chieng with respect to claims 22, 29, and 36. As such, the combination of Egbert, Chieng and Gates also fails to disclose or suggest all of the elements of claims 26, 33, and 40. Additionally, claims 26, 33, and 40 should be allowed for at least their dependence upon claims 22, 29, and 36, and for the specific limitations recited therein.

Applicants respectfully submit that the cited prior art fails to disclose or suggest all of the elements of the claimed invention. These distinctions are more than sufficient to render the claimed invention unanticipated and unobvious. It is therefore respectfully requested that all of claims 22-42 be allowed, and this application passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicants' undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,

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Enclosures: Replacement Sheet, Figs. 1-2
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